IN THE CLAIMS

Please amend the claims as follows:

1. (original) Method for obtaining a data recording on a first medium from a data stream originating from a second medium, the data stream comprising a plurality of data segments each having a different recording start time,

the method comprising:

generating a recording segment of the data recording on the first medium based on a determination of a duration of a present recording segment,

characterized in that a new recording segment is generated when a recording time discontinuity exceeds a threshold value, the recording time discontinuity being a difference between a recording end time of a first data segment and a recording start time of a next data segment.

2. (original) Method according to claim 1, in which the threshold value is a function dependent on a desired recording segment duration (d) and the present recording segment duration.

3. (original) Method according to claim 1, in which the new recording segment is generated by insertion of index markers of a first type in the data recording on the first medium.

4. (original) Method according to claim 1, in which the threshold value function is a continuously decreasing function in time.

5. (original) Method according to claim 4, in which the threshold function comprises a combination of two linear functions in time:

$th(t) = tho - a1 * (t - C*d)$ for $t < (C+0.5)*d$;

$th(t) = th1 - a2 * (t - (C+1)*d)$ for $(C+0.5)*d < t < (C+1.5)*d$;

$th(t) = 0$ for $t > (C+1.5*d)$,

in which C is a count of the index marker of the first type, a1 is a first linear coefficient, and a2 is a second linear coefficient.

6. (original) Method according to claim 1, further comprising a pre-scan of the data stream to obtain the recording time discontinuities in the data stream.

7. (original) Method according to claim 6, in which a subset of recording time discontinuities is selected from all detected recording time discontinuities as starting points for a new segment, for which the value of CMI_{ps} is minimized,

$$CMI_{ps} = \mathrm{C} \cdot (1 - coverage) + \mathrm{I} \cdot imbalance$$

in which

$$coverage = \frac{\sum_{c} delta_c}{\sum_{s} delta_s}$$

is a coverage property of the data recording, with

$delta_c$ = difference in recording start time of recording segment c and recording end time of the previous recording segment c;

$delta_s$ = difference in recording start time of data segment s and recording end time of the previous data segment s; and

$$imbalance = \sum_{c} |dur_c - avrdur|$$

is an imbalance property of the data recording, with

$avrdur$ = predefined average recording segment duration;

dur_c = duration of recording segment c;

and

C = a predefined constant weight factor for the coverage property;

I = a predefined constant weight factor for the imbalance property.

8. (original) Method according to claim 1, in which the method further comprises translation of selected index markers of the first type into index markers of a second type based on a predetermined set of criteria.

9. (original) Recording system for obtaining a data recording on a first medium (4) from a data stream originating from a second medium (5), the data stream comprising a plurality of data segments each having a different recording start time, the recording system (1) comprising input means for receiving the data stream from the second medium (5), output means for storing the data recording on the first medium (4), and processing means (2, 3) connected to the input means and output means, which processing means are arranged for generating a recording segment of the data recording on the first medium (4) based on a determination of a duration of a present recording segment, characterized in that the processing means (2, 3) are further arranged for generating a new recording segment generated when a recording time discontinuity exceeds a threshold value, the recording time discontinuity being a difference between a recording end time of a first data segment and a recording start time of a next data segment.

10. (currently amended) Recording system according to claim 9, in which ~~the processing means are further arranged to execute the activities of the method according to one of the claims 2 through 8~~ the threshold value is a function dependent on a desired recording segment duration (d) and the present recording segment duration.

11. (currently amended) ~~Computer program product for obtaining a data recording on a first medium (4) from a data stream originating from a second medium (5), the computer program product comprising computer executable code, which, when loaded by a computer system, provides the computer system with the functionality of the method according to one of the claims 1-8~~ Recording system according to claim 9, in which the processing means are further arranged for generating a new recording segment by insertion of index markers of a first type in the data recording on the first medium.

12. (new) Recording system according to claim 9, wherein the threshold value function is a continuously decreasing function in time.

13. (new) Recording system according to claim 12, wherein the threshold function comprises a combination of two linear functions in time:

th(t) = tho - a1 * (t - C*d) for t < (C+0.5)*d;

th(t) = th1 - a2 * (t - (C+1)*d) for (C+0.5)*d < t < (C+1.5)*d;

th(t) = 0 for t > (C+1.5*d),

in which C is a count of the index marker of the first type, a1 is a first linear coefficient, and a2 is a second linear coefficient.

14. (new) Recording system according to claim 9, wherein the processing means are further arranged for pre-scanning of the data stream to obtain the recording time discontinuities in the data stream.

15. (new) Recording system according to claim 14, wherein the processing means are further arranged for selecting a subset of recording time discontinuities from all detected recording time discontinuities as starting points for a new segment, for which the value of CMI_{ps} is minimized,

$$CMI_{ps} = \mathrm{C} \cdot (1 - coverage) + \mathrm{I} \cdot imbalance$$

in which

$$coverage = \frac{\sum_{C} delta_C}{\sum_{S} delta_S}$$

is a coverage property of the data recording, with

$delta_c$ = difference in recording start time of recording segment c and recording end time of the previous recording segment c;

$delta_s$ = difference in recording start time of data segment s and recording end time of the previous data segment s; and

$$imbalance = \sum_c |dur_c - avrdur|$$

is an imbalance property of the data recording, with

avrdur = predefined average recording segment duration;

dur_c = duration of recording segment c;

and

C = a predefined constant weight factor for the coverage property;

I = a predefined constant weight factor for the imbalance property.

16. (new) Recording system according to claim 9, wherein the processing means are further arranged for translating of selected index markers of the first type into index markers of a second type based on a predetermined set of criteria.

17. (new) Computer program product for obtaining a data recording on a first medium (4) from a data stream originating from a second medium (5), the computer program product comprising computer

executable code, which, when loaded by a computer system, provides the computer system with the functionality of the method according to claim 1.